



Tennessee Valley Authority, 714 Swan Pond Road, Harriman, Tennessee 37748

February 24, 2021

Joshua Frazier
TDEC – KEFO, Mining Section
3711 Middlebrook Pike
Knoxville, TN 37921
DWRWater.Compliance@tn.gov; joshua.fraizer@tn.gov

Dear Mr. Frazier:

TENNESSEE VALLEY AUTHORITY (TVA) – KINGSTON FOSSIL PLANT - TENNESSEE MULTI-SECTOR GENERAL PERMIT FOR INDUSTRIAL ACTIVITY – TNR051787 – ANNUAL STORMWATER MONITORING REPORT - 2021

Enclosed is the analytical and Annual Storm Water Monitoring Report for Kingston and a table summarizing the samples collected in 2021. There was no sample collected at F22 as there was no flow.

Outfall Number	Total Iron (mg/l)	TSS (mg/l)
Cut-off Concentration	5.0 mg/L	150 mg/L
F6A	0.656	NA
F7	0.278	NA
F13B	0.272	NA
F15B	0.0725	NA
F16	0.266	NA
F17A	0.283	NA
F17C	0.280	NA
F18	0.273	NA
F19A	0.0807	6.10
F20	3.31	115
F21	0.0714	3.90
F22	----	----
F23	0.278	20.4
F24	1.23	12.2

If you have any questions about this report, please contact Adele Dennison at (865) 717-2157.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Sincerely,

Timothy D. Jackson
Plant Manager
TVA - Kingston Fossil Plant

TDJ:amd
Page 2

Enclosures

cc: Natalie Harris
DWRWater.Compliance@tn.gov
Brad Love, BR 4A-C.
ECM
Plant file



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

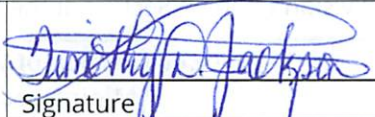
ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F6A
List all TMSP sectors which apply to discharge from this outfall: O	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.656	Total Suspended Solids	150	
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title	Signature	Date



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F7
List all TMSP sectors which apply to discharge from this outfall: O	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.278	Total Suspended Solids	150	
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title	Signature	Date



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243


ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F13B
List all TMSP sectors which apply to discharge from this outfall: O	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.272	Total Suspended Solids	150	
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title	Signature	Date



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

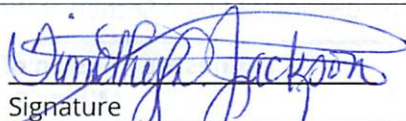
ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F15B
List all TMSP sectors which apply to discharge from this outfall: O	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.0725	Total Suspended Solids	150	
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title		Signature



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F16
List all TMSP sectors which apply to discharge from this outfall: O	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.266	Total Suspended Solids	150	
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title	Signature	Date



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

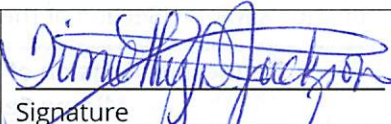
ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F17A
List all TMSP sectors which apply to discharge from this outfall: O	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.283	Total Suspended Solids	150	
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
Timothy D. Jackson <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> Printed Name	Plant Manager <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> Official Title	 Signature	2-24-2021 <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> Date



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243


ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F17C
List all TMSP sectors which apply to discharge from this outfall: O	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.280	Total Suspended Solids	150	
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title	Signature	Date



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F18
List all TMSP sectors which apply to discharge from this outfall: O	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.273	Total Suspended Solids	150	
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title	Signature	Date



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

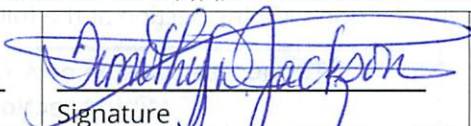
ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F19A
List all TMSP sectors which apply to discharge from this outfall: L	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.0807	Total Suspended Solids	150	6.10
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title	Signature	Date



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243


ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F20
List all TMSP sectors which apply to discharge from this outfall: L	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	3.31	Total Suspended Solids	150	115
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title	Signature	Date



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243

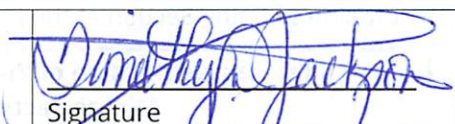
ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F21
List all TMSP sectors which apply to discharge from this outfall: L	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.0714	Total Suspended Solids	150	3.90
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title		Signature



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243


ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F23
List all TMSP sectors which apply to discharge from this outfall: L, O	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	0.278	Total Suspended Solids	150	20.4
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title		Signature

**Tennessee Multi-Sector General Permit (TMSP)
Annual Stormwater Monitoring Report – Instructions**

1. The purpose of this form is to report stormwater (SW) monitoring results under the TMSP. **Only 1 sample per calendar year is required** (except Sectors J and H). **For each outfall, one Annual Stormwater Monitoring Report form must be submitted.** Grab samples should be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. A separate form must be submitted for each outfall. If more than one pH sample is collected for any outfall, report all individual pH monitoring results for a given outfall on the corresponding form or in a separate, referenced attachment if necessary. If more than 1 sample for other parameters is collected at any outfall, submit the average results of all monitoring data (for calculating average, use the numerical method detection limit (MDL) if a parameter was not detected). If all monitoring results for a given parameter were non-detect, report the parameter as below detection limit (BDL) and provide the applicable numerical MDL value in parentheses (e.g., BDL (<0.001 mg/L)). New facilities must conduct sampling in the year during which permit coverage was obtained and during each following year. The form(s) shall be submitted 30 days after the sampling results are obtained, but no later than the March 31st of the following calendar year, whichever comes first.
2. If the results of annual SW runoff monitoring demonstrates that the facility has exceeded the cut-off concentration(s), the permittee must inform the division's local Environmental Field Office (EFO) in writing within 30 days from the time SW monitoring results were received, describing the likely cause of the exceedance(s). Furthermore, within 60 days from the time SW monitoring results were received, the facility must review its stormwater pollution prevention plan (SWPPP), make any modifications or additions to the plan which would assist in reducing runoff concentrations to less than the monitoring cut-off concentrations for that parameter, and submit to the local EFO a summary of the proposed SWPPP modifications (including a timetable for implementation).
3. Low Concentration Waiver – When the average concentration for a pollutant calculated from monitoring data collected from 4 consecutive calendar years of monitoring is less than the cut-off concentration, a facility may waive monitoring requirements in the following annual monitoring period. This form should be used for certification of low concentration waiver provision.

Complete, sign and date this form before it is submitted. Keep a copy of the completed form for your records. The division supports and encourages submission of electronic documents (e.g., scanned reports submitted as PDF files) by using the following dedicated email address: Water.Permits@tn.gov. You may also submit the original completed and signed form to the appropriate Environmental Field Office using the addresses below.

EFO	Street Address	City	Zip	Telephone
Chattanooga	1301 Riverfront Parkway, Suite #206	Chattanooga	37402	(423) 634-5745
Columbia	1421 Hampshire Pike	Columbia	38401	(931) 380-3371
Cookeville	1221 South Willow Ave.	Cookeville	38506	(931) 432-4015
Jackson	1625 Hollywood Drive	Jackson	38305	(731) 512-1300
Johnson City	2305 Silverdale Road	Johnson City	37601	(423) 854-5400
Knoxville	3711 Middlebrook Pike	Knoxville	37921	(865) 594-6035
Memphis	8383 Wolf Lake Drive	Bartlett	38133	(901) 371-3000
Nashville	711 RS Gass Boulevard	Nashville	37216	(615) 687-7000

Mining and quarrying facilities only (Sectors J and H) should submit one signed copy of Annual Stormwater Monitoring Report to the division's Mining Section at the following address:

**Tennessee Division of Water Resources
Mining Section
3711 Middlebrook Pike
Knoxville, TN 37921**



Tennessee Department of Environment and Conservation
Division of Water Resources
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243


ANNUAL STORMWATER MONITORING REPORT
for Stormwater Discharges Associated with Industrial Activity under the
TENNESSEE MULTI-SECTOR GENERAL PERMIT (TMSP)

Facility Name: TVA-Kingston Fossil Plant	TMSP Number: TNR051787
Contact Person: Adele Dennison	Phone Number: 865-717-2157
This report is submitted for the following calendar year (e.g. 2015): 2021	Outfall Number: F24
List all TMSP sectors which apply to discharge from this outfall: L, O	Sample Date: 2/11/2021
Low Concentration Waiver (Note 3): list all parameters for which the facility is certifying that there has not been a significant change in industrial activity or the pollution prevention measures in the area of the facility that drains to the outfall for which sampling was waived:	

DIRECTIONS: In the spaces below, provide the results of stormwater monitoring for the designated outfall. For each outfall, one Annual Stormwater Monitoring Report must be submitted. The parameters for which monitoring must be conducted depend on which industry sector(s) of the TMSP applies to the discharge. Look up your sector(s) in the TMSP and analyze for the parameters that apply. If parameter is not listed below, submit additional sheets. All samples should be grab.

Parameter	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)	Parameter (continued)	Cut-off Conc. (mg/L)	Annual Sample Result (mg/L)
Aluminum, Total	0.75		Magnesium, Total	0.0636	
Ammonia	4.0		Mercury, Total	0.0024	
Arsenic, Total	0.16854		Nickel, Total	0.875	
BOD, 5-Day	30		Nitrate + Nitrite Nitrogen	0.68	
Cadmium, Total	0.0159		Oil and Grease	15	
COD	120		pH	5.0-9.0	
Copper, Total	0.018		Phosphorus, Total (as P)	2.0	
Cyanide, Total	0.064		Selenium, Total	0.2385	
Fluoride	1.8		Silver, Total	0.032	
Iron, Total	5.0	1.23	Total Suspended Solids	150	12.2
Lead, Total	0.15		Zinc, Total	0.395	

CERTIFICATION AND SIGNATURE: (Make all entries in ink, not with a pencil. This report must be signed by a responsible corporate officer for a corporation, a general partner for a partnership, the proprietor for a sole proprietorship, or a principal executive officer or ranking elected official for a public agency.)

I certify under penalty of law that this document and all of its attachments were prepared under my direction or my supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.			
Timothy D. Jackson	Plant Manager		2-24-2021
Printed Name	Official Title		Signature



Environment Testing
America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-117182-1
Client Project/Site: KIF Stormwater

For:
Tennessee Valley Authority
714 Swan Pond Road
Harriman, Tennessee 37748

Attn: Adele Dennison

Authorized for release by:
2/22/2021 10:02:38 AM

Gail Lage, Senior Project Manager
(615)301-5741
Gail.Lage@Eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

1

2

3

4

5

6

7

Case Narrative

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Job ID: 180-117182-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-117182-1

Comments

No additional comments.

Receipt

The samples were received on 2/13/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): F15 (180-117182-1). The container labels list a sample id of F15B, while the COC lists F15. The id on the COC was used.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-117182-1	F15	Water	02/11/21 09:20	02/13/21 10:00	
180-117182-2	F23	Water	02/11/21 09:25	02/13/21 10:00	
180-117182-3	F16	Water	02/11/21 09:35	02/13/21 10:00	
180-117182-4	F13B	Water	02/11/21 09:40	02/13/21 10:00	
180-117182-5	F18	Water	02/11/21 09:45	02/13/21 10:00	
180-117182-6	F7	Water	02/11/21 09:53	02/13/21 10:00	
180-117182-7	F17A	Water	02/11/21 09:58	02/13/21 10:00	
180-117182-8	F17C	Water	02/11/21 10:03	02/13/21 10:00	
180-117182-9	F6A	Water	02/11/21 10:10	02/13/21 10:00	

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Client Sample ID: F15

Lab Sample ID: 180-117182-1

Date Collected: 02/11/21 09:20

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.0725		0.0500		mg/L		02/18/21 14:56	1	RSK

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Client Sample ID: F23

Lab Sample ID: 180-117182-2

Date Collected: 02/11/21 09:25

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.278		0.0500		mg/L		02/18/21 15:07	1	RSK

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total Suspended Solids	20.4		0.500		mg/L		02/16/21 13:21	1	REI

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Client Sample ID: F16

Lab Sample ID: 180-117182-3

Date Collected: 02/11/21 09:35

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.266		0.0500		mg/L		02/18/21 15:11	1	RSK

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Client Sample ID: F13B

Lab Sample ID: 180-117182-4

Date Collected: 02/11/21 09:40

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.272		0.0500		mg/L		02/18/21 15:14	1	RSK

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Client Sample ID: F18

Lab Sample ID: 180-117182-5

Date Collected: 02/11/21 09:45

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.273		0.0500		mg/L		02/18/21 15:18	1	RSK

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Client Sample ID: F7

Lab Sample ID: 180-117182-6

Date Collected: 02/11/21 09:53

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.278		0.0500		mg/L		02/18/21 15:22	1	RSK

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Client Sample ID: F17A

Lab Sample ID: 180-117182-7

Date Collected: 02/11/21 09:58

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.283		0.0500		mg/L		02/18/21 15:25	1	RSK

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Client Sample ID: F17C

Lab Sample ID: 180-117182-8

Date Collected: 02/11/21 10:03

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.280		0.0500		mg/L		02/18/21 15:29	1	RSK

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Client Sample ID: F6A

Lab Sample ID: 180-117182-9

Date Collected: 02/11/21 10:10

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.656		0.0500		mg/L		02/18/21 15:33	1	RSK

Accreditation/Certification and Definitions Summary

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21
California	State	2891	02-21-21
Connecticut	State	PH-0688	09-30-20 *
Florida	NELAP	E871008	06-30-21
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-21
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20 *
Nevada	State	PA00164	07-31-21
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-21
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-21
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-21
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-21

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification and Definitions Summary

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117182-1

Method	Method Description	Protocol	Laboratory
EPA 200.8 Rev 5	Metals (ICP/MS)	EPA	TAL PIT
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PIT
200.8	Preparation, Total Recoverable Metals	EPA	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:


TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

6

2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information			Sampler:		Lab PM: Lage, Gail		Carrier Tracking No(s): 1103 6127 3921		COC No:															
Client Contact: Adele Dennison			Phone: 865-717-2072		E-Mail: Gail.Lage@testamericainc.com				Page: 1 of 1															
Company: TVA - Kingston Fossil Plant					Analysis Requested					Job #:														
Address: 714 Swan Pond Road			Due Date Requested: Standard		 180-117182 Chain of Custody					Preservation Codes:														
City: Harriman			TAT Requested (days): Standard							A - HCL B - NaOH		M - Hexane N - None												
State, Zip: TN 37748																								
Phone: 865-717-2072			4785770																					
Email: amdennison@tva.gov			WO #:																					
Project Name: 2021 Stormwater			Project #:																					
Site: TVA - Kingston Fossil Plant			SSOW#:																					
Sample Identification			Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perforated Sample (Yes or No)		200.8 MOD Total Fe		TSS		Total Number of containers		Special Instructions/Note:			
F15			2/11/21		920		G		W		N		N		X						1			
F23			2/11/21		925		G		W		N		N		X		X				2			
F16			2/11/21		935		G		W		N		N		X						1			
F13B			2/11/21		940		G		W		N		N		X						1			
F18			2/11/21		945		G		W		N		N		X						1			
F7			2/11/21		953		G		W		N		N		X						1			
F17A			2/11/21		958		G		W		N		N		X						1			
F17C			2/11/21		1003		G		W		N		N		X						1			
F6A			2/11/21		1010		G		W		N		N		X						1			
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological												Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input checked="" type="checkbox"/> Archive For _____ Months												
Deliverable Requested: I, II, III, IV, Other (specify)												Special Instructions/QC Requirements: Send results to amdennison@tva.gov												
Empty Kit Relinquished by:					Date:					Time:					Method of Shipment:									
Relinquished by: Adele Dennison					Date/Time: 2-11-21 1200					Company:					Date/Time: 2-13-21 1000					Company: EPA-4				
Relinquished by:					Date/Time:					Company:					Date/Time:					Company:				
Relinquished by: Wm. Joseph Burke					Date/Time: 6/3/20					Company: TVA					Date/Time:					Company:				
Custody Seals Intact: Δ Yes Δ No					Custody Seal No.:					Cooler Temperature(s) °C and Other Remarks:														

Page 16 of 16

2/22/202

1
2
3
4
5
6
7



Environment Testing
America

ANALYTICAL REPORT

Eurofins TestAmerica, Pittsburgh
301 Alpha Drive
RIDC Park
Pittsburgh, PA 15238
Tel: (412)963-7058

Laboratory Job ID: 180-117181-1
Client Project/Site: KIF Stormwater

For:
Tennessee Valley Authority
714 Swan Pond Road
Harriman, Tennessee 37748

Attn: Adele Dennison

Authorized for release by:
2/22/2021 9:51:34 AM

Gail Lage, Senior Project Manager
(615)301-5741
Gail.Lage@Eurofinset.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

1
2
3
4
5
6
7

Case Narrative

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117181-1

Job ID: 180-117181-1

Laboratory: Eurofins TestAmerica, Pittsburgh

Narrative

Job Narrative
180-117181-1

Comments

No additional comments.

Receipt

The samples were received on 2/13/2021 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1° C.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117181-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
180-117181-1	F20	Water	02/11/21 10:17	02/13/21 10:00	
180-117181-2	F24	Water	02/11/21 10:28	02/13/21 10:00	
180-117181-3	F21	Water	02/11/21 10:35	02/13/21 10:00	
180-117181-4	F19A	Water	02/11/21 10:47	02/13/21 10:00	

3

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117181-1

Client Sample ID: F20

Lab Sample ID: 180-117181-1

Date Collected: 02/11/21 10:17

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	3.31		0.0500		mg/L		02/18/21 14:31	1	RSK

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total Suspended Solids	115		1.25		mg/L		02/16/21 13:21	1	REI

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117181-1

Client Sample ID: F24

Lab Sample ID: 180-117181-2

Date Collected: 02/11/21 10:28

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	1.23		0.0500		mg/L		02/18/21 14:45	1	RSK

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total Suspended Solids	12.2		0.556		mg/L		02/16/21 13:21	1	REI

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117181-1

Client Sample ID: F21

Lab Sample ID: 180-117181-3

Date Collected: 02/11/21 10:35

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.0714		0.0500		mg/L		02/18/21 14:49	1	RSK

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total Suspended Solids	3.90		0.500		mg/L		02/16/21 13:21	1	REI

Client Sample Results

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117181-1

Client Sample ID: F19A

Lab Sample ID: 180-117181-4

Date Collected: 02/11/21 10:47

Matrix: Water

Date Received: 02/13/21 10:00

Method: EPA 200.8 Rev 5 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Iron	0.0807		0.0500		mg/L		02/18/21 14:53	1	RSK

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Analyzed	Dil Fac	Analyst
Total Suspended Solids	6.10		0.500		mg/L		02/16/21 13:21	1	REI

Accreditation/Certification and Definitions Summary

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117181-1

Laboratory: Eurofins TestAmerica, Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-21
California	State	2891	02-21-21
Connecticut	State	PH-0688	09-30-20 *
Florida	NELAP	E871008	06-30-21
Georgia	State	PA 02-00416	04-30-21
Illinois	NELAP	004375	06-30-21
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-21
Kentucky (WW)	State	KY98043	12-31-21
Louisiana	NELAP	04041	06-30-21
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-20 *
Nevada	State	PA00164	07-31-21
New Hampshire	NELAP	2030	04-05-21
New Jersey	NELAP	PA005	06-30-21
New York	NELAP	11182	04-01-21
North Carolina (WW/SW)	State	434	12-31-21
North Dakota	State	R-227	04-30-21
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-21
Rhode Island	State	LAO00362	12-31-21
South Carolina	State	89014	04-30-21
Texas	NELAP	T104704528	03-31-21
US Fish & Wildlife	US Federal Programs	058448	07-31-21
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-21
Virginia	NELAP	10043	09-14-21
West Virginia DEP	State	142	01-31-22
Wisconsin	State	998027800	08-31-21

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Accreditation/Certification and Definitions Summary

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117181-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Tennessee Valley Authority
Project/Site: KIF Stormwater

Job ID: 180-117181-1

Method	Method Description	Protocol	Laboratory
EPA 200.8 Rev 5	Metals (ICP/MS)	EPA	TAL PIT
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL PIT
200.8	Preparation, Total Recoverable Metals	EPA	TAL PIT

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL PIT = Eurofins TestAmerica, Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

[illegible]